CLAIMS

What is claimed is:

1. A method for treating a patient with angina pectoris, comprising:

providing a miniature leadless implantable stimulator with at least one electrode and with a size and shape suitable for placement of the entire stimulator adjacent to a nerve;

implanting the stimulator adjacent to at least one tissue influencing the angina pectoris of the patient, which tissue is at least one of an intercostal nerve and an intercostal nerve branch;

providing operating power to the stimulator;

using an external appliance to transmit stimulation parameters to the stimulator;

receiving the stimulation parameters at the stimulator;

generating stimulation pulses in accordance with the stimulation parameters, which pulses are generated by the stimulator;

delivering stimulation pulses via the stimulator to the at least one of the intercostal nerves and intercostal nerve branches influencing angina pectoris as a treatment for angina pectoris.

2. The method of Claim 1 further comprising generating and delivering excitatory stimulation pulses to at least one of the intercostal nerves and the intercostal nerve branches.

3. The method of Claim 1 further comprising generating and delivering stimulation pulses of less than about 15 mA to at least one of the intercostal nerves and the intercostal nerve branches.

4. The method of claim 1 wherein the implantable stimulator further comprises at least one sensor and the method further comprises sensing at least one condition of the patient.

5. The method of claim 4 wherein the at least one sensed condition is used to adjust the stimulation parameters.

6. The method of claim 5 wherein the parameter adjustment is performed using the at least one external appliance.

7. The method of claim 5 wherein the parameter adjustment is performed by the implantable stimulator.

8. The method of Claim 1 further comprising

providing at least one sensor;

using the at least one sensor to sense a physical condition; and

adjusting the stimulation parameters based on the sensed condition.

9. A method for treating a patient with angina pectoris, comprising:

providing a miniature implantable stimulator with at least one electrode and with a size and shape suitable for placement of the at least one electrode adjacent to a nerve;

implanting the at least one electrode near at least one tissue influencing the angina pectoris of the patient, which tissue is at least one of an intercostal nerve and an intercostal nerve branch;

providing operating power to the stimulator;

using an external appliance to transmit stimulation parameters to the stimulator;

receiving the stimulation parameters at the stimulator;

generating stimulation pulses in accordance with the stimulation parameters, which pulses are generated by the stimulator;

delivering stimulation pulses via the stimulator and the at least one electrode to the at least one of the intercostal nerves and intercostal nerve branches influencing angina pectoris as a treatment for angina pectoris.

10. The method of claim 9 wherein the at least one electrode is positioned on a lead, which lead is up to about 150 mm long.

11. The method of Claim 9 further comprising generating and delivering excitatory stimulation pulses to at least one of the intercostal nerves and the intercostal nerve branches.

12. The method of Claim 9 further comprising generating and delivering stimulation pulses of less than about 15 mA to at least one of the intercostal nerves and the intercostal nerve branches.

13. The method of claim 9 wherein the implantable stimulator further comprises at least one sensor and the method further comprises sensing at least one condition of the patient.

14. The method of claim 13 wherein the at least one sensed condition is used to adjust the stimulation parameters.

15. The method of claim 14 wherein the parameter adjustment is performed using the at least one external appliance.

16. The method of claim 14 wherein the parameter adjustment is performed by the implantable stimulator.

17. The method of Claim 9 further comprising:
providing at least one sensor;
using the at least one sensor to sense a physical condition; and
adjusting the stimulation parameters based on the sensed condition.